



NCERC HMI Technology Update

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Age of Equipment

- CEF Project Installation



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Equipment Failures

- PCs
 - Windows XP
 - Motherboards, Power Supplies, Memory, Processors, Hard Drives
 - Both Local and Remote HMIs
- Monitors
 - Fans, Power Supplies
 - Resolution Issues

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Equipment Failures Cont.

- Video Signal Chain
 - DVI Detective
 - DVI Splitter
 - KVM



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New Equipment

- August 2014 EOY funds (~\$60k)
 - Computers
 - UPSs
 - Monitors
 - Cabling
 - Interface Cards
 - VM Ware
 - Video Software

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New Equipment Cont.

- PCs
 - DELL Workstations
 - Raid 1, dual quad core processor, 4 port video
 - Windows 7 Professional
 - Local units relocated to Control Room
 - HDMI/USB over Ethernet



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New Equipment Cont.

- Video Signal Chain
 - DVI Detectives – Removed
 - DVI Splitters – Removed
 - Monitors
 - 1920x1080 Widescreen



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Preparation & Testing

- System setup
 - Raid
 - Software & Drivers
 - VM Ware
 - Scripts for installation
- Testing
 - VM Ware
- ~1 year

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Installation

- Hardware
- Cloning
- Communications
 - HMIs
 - Nuclear Instrumentation
 - Utility
- ~2 weeks



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Future Work

- Control Room 1 ~80%



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Future Work

- Control Room 2 Integration Planning and Scheduling
 - Addition of DVR on CCTV system

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QUESTIONS?

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